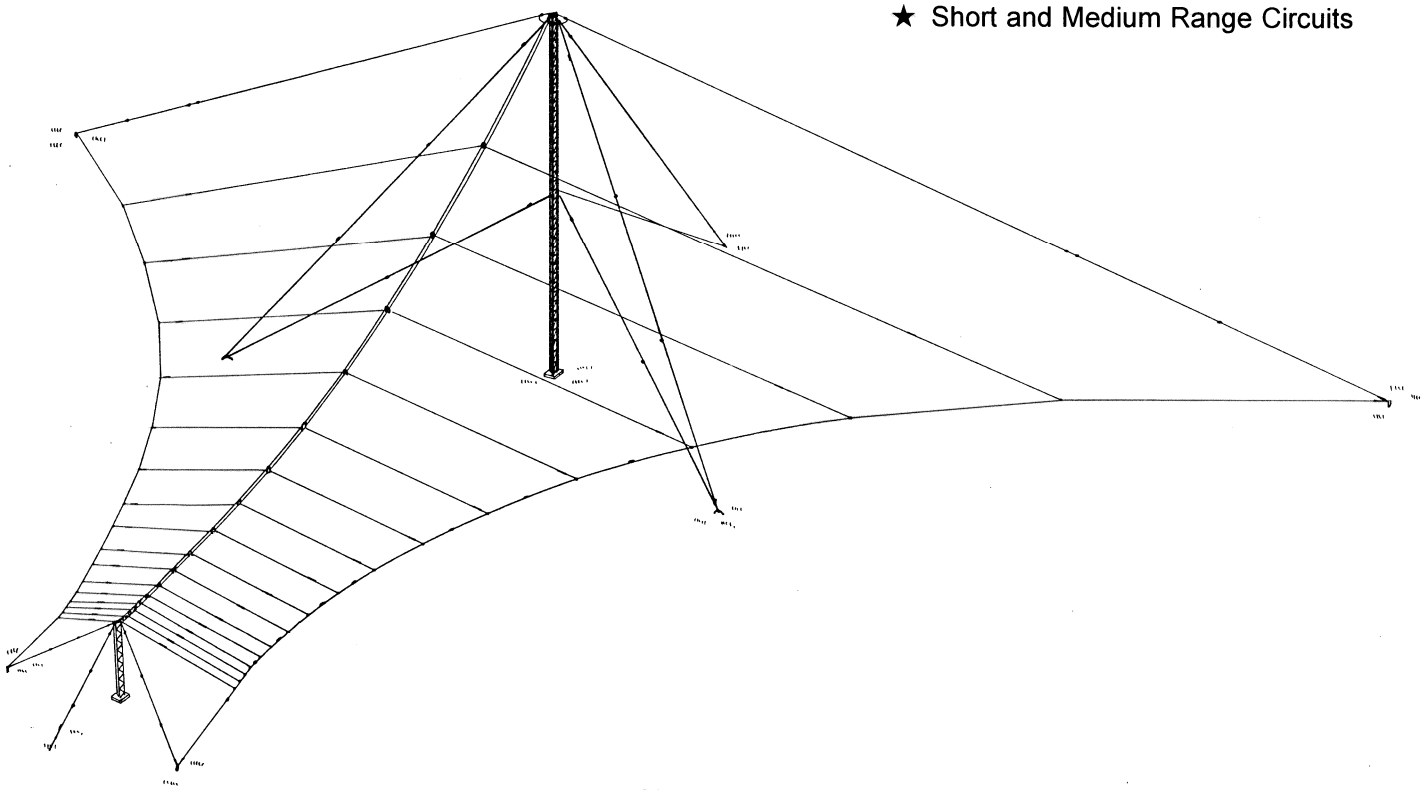
HF Log-Periodic Antenna

CL247-x

★ Only One Tower
★ Lightweight, High Reliability
★ Short and Medium Range Circuits



Model CL247M

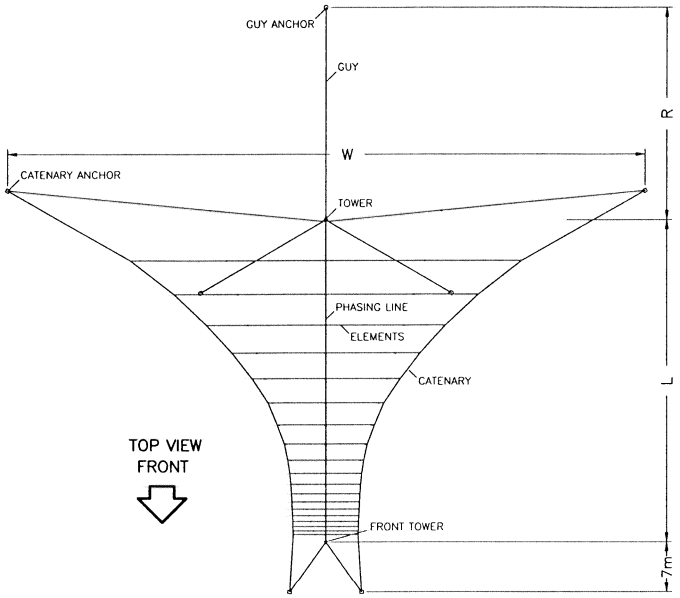
The CD short-medium range CL247 series antenna system has been designed to provide, unsurpassed short to medium range performance through their respective frequency ranges. Due to the characteristics in log-periodic designes, these system provide radiation efficiency which is maintained at a high level. This high radiation efficiency assures that maximum input power is radiated rather than partially dissipated. These systems exhibit VSWR characteristics below 2.0:1 across the designed frequency spectrum with the VSWR remaining below 1.6:1 over 80 percent of the specified bandwidth. The radiation pattern of these antennas exhibits a front-to-back ratio exceeding -10 dB with front-side ratio exceeding 20dB relative to the principle lobe intensity. These characteristics assure a minimum of off-path interference. Radiation pattern characteristics are shown in the specification summary and have been examined through calculations to provide maximum front gain at take-off angles optimum to specified or required path distance. Ground screens are not a part of these system nor are they required, due to insignificant effects upon performance over average or poor earth.

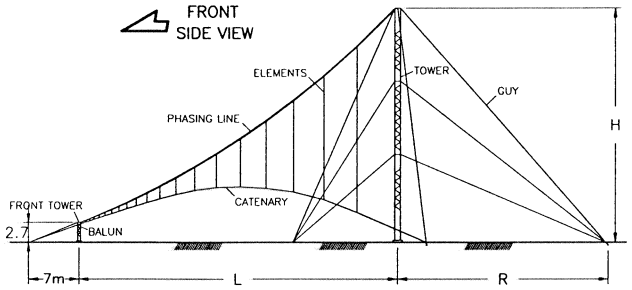
SPECIFICATIONS

Model No.	CL247L	CL247B	CL247M
Frequency Range	2~30MHz	3~30MHz	4~30MHz
Forward Gain	10dBi	11dBi	12dBi
Azimuth Half Power Beam Width	80°~60°	75°~60°	70°~55°
Front/Back Ratio	10dB	10dB	10dB
VSWR, Maximum	2:1	2:1	2:1
Power Handling Capability	- Refer to Note Below -		
Input Impedance	50 ohms	50 ohms	50 ohms
Wind Loading Capability	45 m/s	45 m/s	45 m/s
System Net Weight	1950 Kg	1100 Kg	1050 Kg

Note: Use an appropriate sub-model number when specifying or ordering a system.

	Power	Connector
CL247x-1.	Receive	-N- Female
CL247x-1.	Transmit, 1kW/2kW PEP	-N- Female
CL247x-3.	Transmit, 5kW/10kW PEP	7/8" EIA Female
CL247x-4.	Transmit, 10kW/20kW PEP	1-5/8" EIA Female

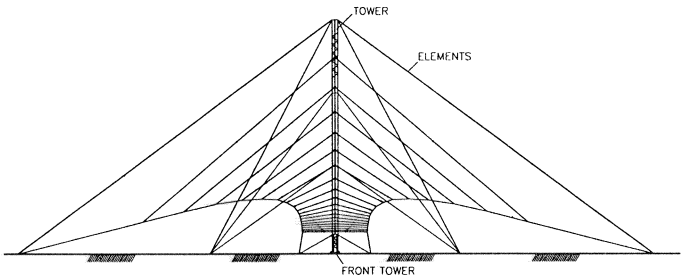




TABLE−1. Outline Dimentions.

MODEL	H	L	W	R
CL247M	32	44	88	29
CL247B	32	44	88	29
CL247L	42	60	116	38

Dimention in Meter.



FRONT VIEW

Elevation and Azimuth Patterns (Azimuth Pattern at Elevation Angle of Beam Max.)

Model CL247M